

D.T2.2.3 Summary report of the technological pilot test -FUA Katowicice





Katowice during the realisation of the project designed and developed two investment projects. The first one is the air quality monitoring system fort he City of Katowice. System consists of 127 sensors and 154 screens, dedicated website also in mobile version, administrator panel and implemented short term action plan module within creating decision support system. The sensors and screens are localized in each district in the city and localized only on public buildings like schools, preschools, nurseries and city hall buildings. The devices are installed in 184 localizations in the city. The 97 location contains both sensor and screen, and the other 87 contains sensor or screen which depends on the distance from other sensor, or number of people visiting building. The system was developed by an external contractor selected in the tender procedure. The construction of the system started in September 2018 and was completed a year later.

The air quality monitoring system consist of 127 sensors and 154 screens with dedicated presentations about the current air quality and air quality forecast for the next days. The system covers the entire city, provides information about the air quality in each district and using the data from national monitoring system also from entire region.

The documents listed in the following are available as annexes to the joint deliverable D.T2.2.2-D.T2.2.3 The main focus of the reports is the detailed description of the different activities related to the technological pilot actions carried out in Katowice during winter seasons 2018/19 and 2019/20

The documentation for Pilot tests in Katowice contains the main document with deliverable description for Pilot Tests –Katowice FUA with two major annexes.

The main document is divided in two parts. The first concerns legal aspects and procedures on the basis of which information tasks are carried out, as well as ad hoc mitigation measures in the event of the so-called smog alarm.

The second concerns the pilot investment task involving the installation of selected air pollution sensors in selected locations.

The first annex 2.2.2-3 Attachment no.5 to specification contains specification for the pilot test investment (sensors, screens, system for data gathering and informing system about the air quality using communication matrix from decision support system (DSS).

The specification was used for developing air quality monitoring system for Katowice.

The second annex 2.2.2-3 as -built documentation ver 1.9 contains information about developed air quality monitoring system (pilot test). Document is divided in several chapters with separated description for: air quality sensors, screens, data gathering system, decision support system and informing procedures.



The second project was common pilot action in public schools in Katowice. The investment consist 9 measuring stations that were installed in 3 institutions -a selected kindergarten, school and nursery department.

Measurement stations takes measurement son air temperature, PM10, PM2.5, concentration (level) of carbon dioxide -CO2 in the air, temperature compensated relative humidity. In addition, the system monitors the opening of windows and doors through a system of wireless reed switch sensors.

The data from devices installed during pilot action 1 and 2 was used to create analysis to compare the relation between outdoor and indoor air quality.